

NEW NEARCTIC CRANE-FLIES (TIPULIDÆ, DIPTERA)  
PART VIII.

BY CHARLES P. ALEXANDER, URBANA, ILL.

As in the other papers of this series, the types of the new species are deposited in the collection of the writer, unless stated otherwise.

GENUS *Dicranoptycha* OSTEN SACKEN.

***Dicranoptycha sobrina quadrivittata***, new subspecies.

*Female*.—Length 10 mm.; wing 10.5 mm.

This variety is similar to typical *sobrina*, differing as follows:

Mesonotal præscutum gray, more yellowish on the disk, clearer gray along the margin; four distinct dark brown stripes, the median pair longest, indistinct in front, clearer behind, lying parallel and separated from one another only by a capillary gray line. Tuberculate pits distinct, close together, lying just before the level of the pseudosutural foveæ, separated from one another by a distance a little less than the diameter of one. Pseudosutural foveæ very pale, elongate, linear. Lateral stripes short. Scutal lobes dark brown. Pleura grayish above, paler ventrally. Coxæ whitish. Wings gray; veins dark brown; wings very long and narrow; *Rs* shorter than cell *1st M<sub>2</sub>*, almost square at its origin and running close to *Ri*; *Sc* ends just before the fork of the sector. Abdominal tergites uniformly dark brown.

*Habitat*.—Colorado.

*Holotype*.—♀, Peaceful Valley, Colorado, August 25, 1917, (T. D. A. Cockerell).

This species was included in some interesting crane-fly material kindly sent me for study by Prof. Cockerell. It is very different in the details given above from the extensive series of typical *sobrina* in my collection. More material will be needed to determine the true status of the fly.

GENUS *Molophilus* CURTIS.

***Molophilus squamosus***, new species.

Antennæ of the male short; general coloration dark gray; male hypopygium with the dorsal pleural appendage flattened, very broad, the dorsal face roughened; ventral pleural appendage a powerful black arm that is acute at the tip, which is bent ventrad.

*Male*.—Length 3.2–3.4 mm.; wing 4.7–5 mm.

Rostrum and palpi dark brown. Antennæ of the male short, dark brown throughout. Head gray.

Pronotum dark brown medially, yellowish laterally. Mesonotum gray, the humeral angles paler; scutelum yellowish; postnotum brownish gray. Pleura grayish. Halteres yellow, the knobs a little darker. Legs with the coxæ, trochanters and base of the femora yellowish; remainder of the legs brown. Wings whitish subhyaline; veins dark brown; a very indistinct darker clouding along the cord at *r*, *r-m* and the basal deflection of *Cu<sub>1</sub>*. Venation: deflection of *R<sub>2+3</sub>* short, subperpendicular, shorter than the basal deflection of *Cu<sub>1</sub>*; fusion of *Cu<sub>1</sub>* and *M<sub>3</sub>* very long, much longer than *Cu<sub>1</sub>* beyond the fork.

Abdomen dark brown, the posterior margins of the tergites yellowish, broader on the terminal segments; hypopygium grayish brown. Male hypopygium with each half of the tergite contiguous or overlapping at the tips. Dorsal pleural appendage lying transversely, the tip directed proximad and dorsad,

very broad and flattened with the dorsal surface minutely roughened into tiny spines or raised scales that are more prominent, subserrate, along the outer margin. Ventral pleural appendage powerful, acute, shiny black, straight basally, suddenly narrowed to the acute tips which are directed ventrad, the concave face weakly toothed.

*Habitat*.—California.

*Holotype*.—♂, Alpine, San Diego County, California, April 9, 1915, (M. C. Van Duzee).

*Paratopotype*.—Sex uncertain.

The type is in the collection of Mr. Van Duzee.

Additional specimens of a closely related form from the Muir woods, Marin County, California (May 19, 1915, M. C. Van Duzee) agree closely with this species in general characters, but are much more reddish in their general colour, the dorsal pleural appendage not so broad, and the ventral pleural appendage with about three or four large spinules before the tip. *Molophilus squamosus* is a small, delicate species, allied to *M. paulus* Bergroth, but readily distinguished by the very broad, dorsal pleural appendages and the differently constructed ventral appendage. From *M. spiculatus* Alex., *M. comatus* (Doane) and other allied forms it is told by its much smaller size and slightly different structure of the male hypopygium.

***Molophilus bispinosus*, new species.**

Antennæ of the male short; general coloration light brown; male hypopygium with the lobes of the ninth tergite produced apically into straight, slender arms; dorsal pleural appendage elongate, very straight and slender, acute at the tip; ventral pleural appendage powerful, sickle-shaped, the concave face with strong spinules.

*Male*.—Length about 4 mm.; wing 5.5 mm.

Rostrum and palpi brown. Antennæ of the male short, the scape brownish yellow, the flagellar segments dark brown, clothed with a long pale pubescence. Head with the front yellow, vertex and occiput gray.

Pronotum pale. Mesonotum light brown, the tuberculate pits black, widely separated. Pleura grayish brown. Halteres pale. Legs brownish yellow, the tips of the tarsi darkened. Wings subhyaline; a faint blotch of dark hairs on the radial cross-vein and another on the radial-median vein; a faint cloud at the basal deflection of *Cu*<sub>1</sub>; veins dark brown, subcosta yellow. Venation: basal deflection of *R*<sub>4+5</sub> and *r-m* in alignment; fusion of *Cu*<sub>1</sub> and *M*<sub>3</sub> a little shorter than *Cu*<sub>1</sub> beyond the fork.

Abdomen dark brown, the hypopygium reddish yellow. Male hypopygium with the tergite profoundly split medially as in the genus, the halves thus formed with the tips rather narrow, directed proximad so as to be almost contiguous on the median line; each lobe on the sides at the apex produced caudad into a slender, flattened, straight, fleshy lobe whose inner margin is fimbriate. Dorsal pleural appendage slender, elongate, almost straight beyond the enlarged base, the tips acute. Ventral pleural appendage powerful, strongly curved, the subacute apex directed ventrad, the ventral or concave face with several equidistant large and acute spinules.

*Habitat*.—California.

*Holotype*.—♂, Berkeley, California, May 25, 1915, (M. C. Van Duzee).

GENUS *Gnophomyia* OSTEN SACKEN.***Gnophomyia tristissima cockerelli***, new subspecies.

*Female*.—Length about 8.5 mm.; wing 7.2 mm.

Similar to typical *tristissima*, differing as follows: Antennæ a little longer. Legs somewhat stouter. Wings hyaline, with a few dark seams along the veins, these seams on *Rs*, *R<sub>4+5</sub>*, *M*, *Cu*, *M<sub>3</sub>* and *second A*; cell *Sc* dark. Venation: *Sc* ending beyond the fork of *Rs*; *Sc<sub>1</sub>* long, about equal to *R<sub>2+3</sub>*.

*Habitat*.—Colorado.

*Holotype*.—♀, Campus of the University of Colorado, Boulder, Colorado, September 20, 1917, (Felicita Claer).

The distinctly bicolorous, longitudinally streaked, wings is the most conspicuous character to separate this fly from typical *tristissima* O. S. of the eastern United States, in which the wings are uniformly darkened. The type was kindly sent me by Prof. Cockerell, to whom the form is respectfully dedicated. In the collection of the United States National Museum there are a few specimens of this variety, likewise from Colorado (from the collection of C. V. Riley, taken by Morrison).

GENUS *Gonomyia* MEIGEN.***Gonomyia (Gonomyia) aciculifera***, new species.

Belongs to the *noveboracensis* group; similar to *noveboracensis* Alex. but larger; wings with *Sc* shorter and with *Sc<sub>2</sub>* at the tip of *Sc<sub>1</sub>*; *R<sub>2</sub>* not so close to *R<sub>1</sub>* at the wing margin; male hypopygium with the ventral pleural appendage expanded at the apex into a paddle-like blade whose lower margin is minutely toothed.

*Male*.—Length 5 mm.; wing 5.4 mm.

Described from an alcoholic specimen.

Rostrum and palpi entirely dark brown. Antennæ dark brown throughout, the basal segments enlarged. Head dark.

Mesonotum dark, the humeral angles a little brighter. Pleura brownish, brighter posteriorly. Halteres elongated, pale, the knobs dark. Legs with the coxæ dark, the trochanters a little paler; remainder of the legs broken. Wings pale grayish yellow; stigma indistinct; veins light brown. Venation: *Sc* rather short, ending far before the origin of the sector, the distance between the two only a little less than the length of the basal deflection of *Cu<sub>1</sub>*; *Sc<sub>2</sub>* very close to the tip of *Sc<sub>1</sub>* and about subequal to it; *Rs* strongly arcuated; *R<sub>2+3</sub>* very long as in this group of species, almost straight beyond the origin; *R<sub>2</sub>* semiperpendicular, short, the distance on the wing margin between the tips of veins *R<sub>1</sub>* and *R<sub>2</sub>* is a little greater than *R<sub>2</sub>* alone; cell *R<sub>2</sub>* a little larger than in *noveboracensis*; *R<sub>4+5</sub>* straight, not approaching *M<sub>1+2</sub>* at the wing margin; basal deflection of *Cu<sub>1</sub>* at the fork of *M*.

Abdomen dark, the posterior margins of the tergites paler. The colours produced by pruinosity in dried specimens are undoubtedly somewhat different from those of the alcoholic type just described. Male hypopygium similar to that of *noveboracensis* (as figured in the Proceedings of The Academy of Natural Sciences of Philadelphia for 1916, Pl. 30, Figs. 79 and 80), but differing in many important respects; the flattened dorsal pleural appendages have but few setæ along the truncated or concave apex; the long, slender, ventral arm is expanded into a paddle at the tip, this with the lower margin minutely

denticulate, the teeth coarser proximally but very minute and delicate on the distal two-thirds of the blade. The tubercle at the dorsal inner edge of the pleurite bears three very long bristles that are but little shorter than the dorsal pleural appendage. The gonapophyses and penis-guard are fused into a sub-cylindrical tube that is armed caudally with several needle-like points. The arrangement of these chitinized horns is about as in *noveboracensis*, but their shape and structure is very different; appendage *b* is almost straight and has the two arms of the bifid tip very unequal, the shorter one appearing as a small spine at about mid-length of the appendage; appendage *c* appears forked at its very base, the one arm very stout basally, near the apex narrowed and strongly curved; the other fork is shorter, gradually pointed and flattened to the tip, the margin with a thin line of hairs. Below (ventrad of) the tube on either side is a very large, flattened, nearly hyaline plate that is almost invisible in balsam.

*Habitat*.—California.

*Holotype*.—♂, Wildcat Cañon, San Pablo, California, September 16, 1906, (J. Chester Bradley).

The type is in the collection of Cornell University.

The only described Nearctic species that is close to *G. aciculifera* is *G. noveboracensis* Alex. (Can. Ent., Vol. 48, pp. 319, 320; 1916) of the northeastern United States. The wing venation and the structure of the male hypopygium will easily separate the two forms. In this group of species, the male hypopygium is very complicated in structure, and I am unable to correlate the remarkable structures that surround the penis-guard, with the gonapophyses found in other groups of the genus. Very few specimens of these two species have yet been discovered, and more material is needed to finally decide these homologies.

GENUS *Tricyphona* ZETTERSTEDT.

### ***Tricyphona petiolata*, new species.**

Size very small; antennæ dark brown, with fifteen evident segments, those toward the tip small and nearly globular; general coloration light buff, the mesonotum with a single conspicuous median dark brown stripe; wings nearly hyaline; cell *R*<sub>3</sub> petiolate; *R*<sub>2</sub> perpendicular, at the very tip of *R*<sub>1</sub>; cell *M*<sub>1</sub> lacking; cell 1st *M*<sub>2</sub> open by the atrophy of *m*; abdomen brown, the hypopygium conspicuously light yellow.

*Male*.—Length about 5.5 mm.; wing 6 mm.

Rostrum and palpi dark brownish black, the former very short. Antennæ dark brownish black, with fifteen evident segments, short, the first segment elongate, the second enlarged, globular, the first flagellar segment elongate ova; those toward the end of the organ smaller and subglobular; the last segment is elongated and constricted medially as though formed by the close approximation of two small segments. Head brownish gray.

Pronotum buffy, broadly dark brown medially. Mesonotum light buffy yellow, the præscutum with a single broad, dark brown median stripe that is narrowed at the tip and becomes obliterated before the suture; lateral præscutal stripes lacking. Pleura buffy yellow. Halteres pale basally, the knobs dark-brown. Legs with the coxæ buff; trochanters light yellow; femora brown, paler basally; tibiæ and tarsi dark brown. Wings nearly hyaline, narrow; stigma lacking; veins yellowish brown. Venation: *Sc* long, ending slightly

beyond the fork of  $R_{2+3+4}$ ;  $R_s$  short, oblique, almost straight;  $R_{2+3+4}$  variable in length, in one wing shorter than the basal deflection of  $Cu_1$ , in the other a little longer;  $R_2$  (the apparent  $r$  cross-vein; see Alexander; A New Interpretation of the Wing-venation of the Pedicine Crane-flies, Ent. News, Vol. 29, pp. 201-205, pl. 12; 1918) inserted at the extreme tip of  $R_1$ , perpendicular; cell  $M_1$  lacking; cell 1st  $M_2$  open by the atrophy of  $m$ ; petiole of cell  $M_3$  nearly equal to the basal deflection of  $Cu_1$ .

Abdomen dark grayish brown, the subterminal segments a little darker; hypopygium conspicuously light yellow.

*Habitat*.—Colorado.

*Holotype*.—♂, Peaceful Valley, Colorado, August 25, 1918, (T. D. A. Cockerell).

This interesting little fly is to all appearances a *Rhaphidolabis* of the subgenus *Plectromyia*, but the number of antennal segments precludes it from that group, and until more material is available I prefer to consider it a *Tricyphona* to where it will run by the keys. There are only fifteen distinct antennal segments, but the terminal one is evidently formed by the close approximation of two very small segments. The fly somewhat resembles a very small specimen of *Rhaphidolabis major* Alex., but the size and venation, especially the position of  $R_2$  and the lack of cell  $M_1$ , easily separate the two.

GENUS *Liogma* OSTEN SACKEN.

***Liogma nodicornis flaveola***, new subspecies.

*Male*.—Length 12 mm.; wing 8.3 mm.

*Female*.—Length 11 mm.; wing 9 mm.

This variety is similar to typical *nodicornis*, but is much more yellowish throughout. Compared with specimens of typical *nodicornis*, the following differences are apparent:

Antennæ light brown. Mesonotal præscutum with the ground colour yellowish brown with the three brown stripes rather narrow and scarcely confluent; scutal lobes only indistinctly darker; mesonotal postnotum yellowish with only the terminal third blackish. Pleura mostly yellow, a small, circular, dull black area on the mesepisternum behind the fore coxa. The extensive shiny black areas on the mesosternum before the middle coxa are not continuous across the midventral line. Abdomen pale brown.

*Habitat*.—Virginia.

*Holotype*.—♂, Great Falls, Virginia, May 19, 1915.

*Allotopotype*.—♀, June 7, 1915.

The northern *L. nodicornis nodicornis* (O. S.) is easily told from the pale yellowish southern race above diagnosed by its much more extensive black thoracic pattern. In the type-material of typical *nodicornis*, both varieties are represented. As typical of *nodicornis* in the strict sense the writer selects the lectotype from the material taken in the White Mts., New Hampshire.

GENUS *Tipula* LINNÆUS.

*Tipula doaneiana*, new name.

*Tipula californica* Doane (1912), non *Tipula californica* (Doane) (1908).

In 1908, Doane described under the name *Pachyrhina californica*, a species of crane-fly that both Dr. Dietz and the writer now refer to the pachyrhinoid series of the genus *Tipula*. Dietz (1918), under the misconception that it was

the 1908 name that was preoccupied, renamed this species *Tipula xanthomela*. The 1912 species is here renamed as above in honour of Prof. R. W. Doane.

**Tipula ludoviciana**, new species.

Belongs to the *tricolor* group; closely related to *T. sayi* Alex. (*costalis* Say); male antennæ very long, bicolorous; wings with a dark costal margin, beneath which is a vitreous streak; a narrow, brown seam along vein *Cu*.

*Male*.—Length about 13.5–14 mm.; wing 11.5–11.8 mm.; antennæ about 13–13.5 mm. Hing leg, femur 9.3 mm.; tibia, 11 mm.

*Female*.—Length about 12 mm.; wing 11.4 mm.

*Male*.—Frontal prolongation of the head moderately elongated, light brown, the nasus slender. Mouth-parts and palpi dark brown. Antennæ exceedingly elongate, approximately as long as the entire body, the scape light brown, the flagellar segments with the basal swelling dark brown, the pedicel light yellow, on the terminal segments more infuscated; the pedicel of the intermediate flagellar segments is six times as long as the basal enlargements; in addition to the usual black verticils, the segments are provided with a delicate pale pubescence that is easily removed. Vertical tubercle prominent, entire. Head dark with an indistinct darker median line.

Mesonotum brown, probably more or less gray pruinose in dry material, the præscutum with three very broad, dark brown stripes; postnotum pale, margined with brown. Pleura pale, probably more or less pruinose in life, with indistinct dark markings on the mesopleura, and dark brownish black on the mesosternum between the middle and hind coxæ. Halteres slender, brown. Legs with the coxæ largely pale; trochanters yellowish, dark brown apically; femora and tibiæ brown, darkest apically; tarsus brown. Wings gray, the costal region dark brown, this including cells *C*, *Sc*, *1st R*<sub>1</sub>, *2nd R*<sub>1</sub>, the anterior portion of *R*, and the outer end of *R*<sub>2</sub>; a broad brown seam along vein *Cu* occupying the space between that vein and the weak degenerate anal vein immediately behind it; a vitreous longitudinal stripe behind the brown costal margin, this including the posterior portion of cell *R*, the anterior portion of *M*, and the base of cells *R*<sub>3</sub> and *R*<sub>5</sub>; veins dark brown. Venation: *m-cu* short but distinct; petiole of cell *M*<sub>1</sub> about as long as cell *1st M*<sub>2</sub>.

Abdominal tergites light brown, the transverse impressed areas on either side near the base of the segments very distinct, black; sternites paler. Male hypopygium small, compressed, as in the *tricolor* group, with the sclerites fused into a continuous ring. Ninth tergite with the median lobe very depressed, broad, the posterior margin with a very flattened, V-shaped notch which is black and roughened; no pencil of hairs on the sides of the median lobe. Outer pleural appendage oval, flattened, pale, with sparse black hairs; inner pleural appendage simple in structure. Ninth sternite carinate. Eighth sternite unarmed.

*Female*.—Similar to the male; antennæ short, much darker coloured than in the male; ovipositor with the tergal valves long, slender, straight; sternal valves short, very compressed, the tips subacute.

*Habitat*.—Louisiana.

*Holotype*.—♂, Morgan City, Louisiana, June 18, 1917, (Cornell University Expedition, Lot 542, sub. 16).

*Allotopotype*.—♀.

*Paratopotypes*.—2 ♂'s.

The type is in the collection of Cornell University.

*Tipula ludoviciana* is allied to, and superficially resembles, *T. sayi* Alex. (*costalis* Say) which has the antennæ of the male short, about reaching the base of the abdomen; no dark seam along the vein *Cu*; the petiole of cell *M*<sub>1</sub> much shorter, and the colorational and hypopygial details different.

This new species of *Tipula* has the male antennæ of a length that is quite unique among the known nearctic species of the genus, but which is equalled or exceeded in certain exotic forms.

**Tipula plutonis**, new species.

Similar to *T. coracina* Alex. of northern Alaska; general coloration gray, the præscutal stripes darker; wings almost clear; abdomen dark gray with the lateral margins of the tergites broadly yellowish; male hypopygium very simple in structure, the ninth tergite broadly transverse, the posterior margin almost straight across with a tiny V-shaped median notch; outer pleural appendage very large and tumid, working transversely across the genital chamber; ninth sternite with a deep, V-shaped notch.

*Male*.—Length 10.5 mm.; wing 11.5 mm.

Frontal prolongation of the head dark brown, the nasus distinct; mouth-parts dark brown. Antennæ short, the basal segments paler brown, the flagellum dark brown throughout; segments of the flagellum short-cylindrical with the terminal swelling about equal to the basal enlargement, the segments but feebly constricted at midlength. Head light gray, more obscure posteriorly.

Mesonotal præscutum dark gray with four indistinct dark brown stripes, the median pair very indistinctly divided by a capillary line. Remainder of the mesonotum dark gray, the scutal lobes indistinctly marked with brownish. Pleura gray, the dorso-pleural membranes more yellowish. Halteres yellowish brown, the knobs dark brown. Legs with the coxæ dark gray, tipped with paler; trochanters yellowish, tipped with blackish; remainder of the legs broken. Wings subhyaline or very pale grayish; stigma distinct, brown; a distinct obliterative streak extending from before the stigma through cell *1st M*<sub>2</sub>; veins dark brown. Venation: *Rs* almost straight; cell *M*<sub>1</sub> very deep, the petiole short, about equal to a or a little less than *r-m*; cell *1st M*<sub>2</sub> pentagonal; *m-cu* obliterated by the punctiform contact of *Cu*<sub>1</sub> on *M*<sub>3+4</sub>.

Abdomen dark gray, the lateral margins of the tergites broadly yellowish, the posterior margins of the tergites and sternites very narrowly and indistinctly ringed with silvery. Male hypopygium of very simple structure. Ninth tergite flattened, broadly transverse, almost rectangular, the posterior margin almost straight across and with a minute median V-shaped notch. Ninth pleurite very extensive, the suture indicated by a distinct curved line beneath, the proximal ventral angle narrowed and tufted with a few long, silky hairs. Outer pleural appendage very large and tumid, the ventral face blackened, the surface of the appendage covered with a few short appressed hairs; inner pleural appendage represented by a small flattened, subcircular lobe. The pleural appendages work across the genital chamber after the fashion of the *Limnobiini*, not against the ninth tergite as in most species of the genus. Ninth sternite profoundly notched by a narrow, V-shaped incision. Eighth sternite

unarmed. Eighth tergite, except at the ends, concealed beneath the seventh tergite.

*Habitat*.—California.

*Holotype*.—♂, Alta Meadow, Sequoia National Park, California, altitude 9,000 feet, July 19, 1907, (J. Chester Bradley).

The type is in the collection of Cornell University.

This primitive little *Tipula* bears a certain resemblance to *T. coracina* Alex. of Alaska, and the two probably belong to the same group of the genus. The type of *T. plutonis* was sent to Prof. Doane for comparison with his types; he notes the general resemblance of the species to *T. spernax* O. S., to which, however, the species is at most distantly related. The fused hypopygium of *T. spernax* with a broad, median tergal lobe will easily separate the species from any other similar member of the genus.

***Tipula shasta***, new species.

Belongs to the *angustipennis* group, close to *T. angustipennis* Lw., but with the thorax darker coloured, the wings of a very decided reddish yellow tinge, the abdomen without a black dorso-median stripe, and the details of the male hypopygium different.

*Male*.—Length 20–21 mm.; wing 17–18 mm.

Frontal prolongation of the head black, moderately elongated, the nasus distinct; mouth-parts black. Antennæ with the first segment black; the second segment and basal two-thirds of the first flagellar segment pale brown to almost black; remainder of the antennæ black; flagellar segments with the basal swelling moderate in size. Head broad, genæ swollen, eyes small. Head dark brown with a very narrow, pale, whitish yellow line surrounding the eyes.

Mesonotal præscutum buffy, more dusky anteriorly, clearer near the suture; præscutum with four very distinct, dark brown stripes, the median pair long, slightly narrowed behind, separated from one another by a more or less distinct capillary line; the lateral stripes, and, less distinctly, the median stripes, are surrounded by a narrow, intensely black border; scutum buffy, the lobes dark brown, surrounded by narrow, black margins; scutellum with three blackish lines; postnotum dark. Pleura dark brown, indistinctly blotched with still darker markings. Halteres orange, the knobs and terminal portions of the stem dark brown. Legs with the coxæ grayish brown; trochanters brown, femora reddish with the tips narrowly dark brown; tibiæ pale reddish, the tips narrowly and indistinctly darkened; tarsi with the basal segments dull reddish, gradually passing into a dark brown. Wings with a strong, saturated, reddish yellow tinge, clearer, more yellow, on the costal region, especially cell *Sc*, more brownish on the posterior portion and the wing-apex in cells *R*<sub>2</sub> and *R*<sub>3</sub>; stigma large, dark brown; a small hyaline obliterative area before and beyond the stigma; an indistinct hyaline line across the base of cell *1st M*<sub>2</sub>; a large pale blotch toward the end of cell *M*, as usual in this group of species; the only nearctic species of *Tipula* known to the writer with wings of this colour is *T. ultima* Alex. (*flavicans* Fabr.) of the eastern United States. Venation: cell *M*<sub>1</sub> short-petiolate, the petiole a little longer than *r-m*; *m-cu* distinct or punctiform.

Abdomen with the first segment blackish; remainder of the abdomen bright reddish, the lateral margins of the tergites more obscure; third abdominal tergite usually a little darker in colour than the other segments. Male hypopy-



gium very similar to that of *T. angustipennis*, but more enlarged and compressed. Ninth tergite large, gradually narrowed posteriorly, the caudal margin with a very broad and deep V-shaped notch, the apices of the adjacent lobes bluntly rounded, and each tipped with a small, chitinized tubercle. Ninth pleurite complete, large, the posterior angle produced caudad into a broad, flattened, obtuse chitinized lobe; proximal ventral angles of the pleurite each with a very prominent yellowish fleshy lobe that juts caudad, the apex bifid by a broad notch; outer pleural appendage small, cylindrical to subclavate, with numerous long, pale hairs; inner pleural appendage a large, compressed blade whose apex juts into the notch of the tergite. Ninth sternite with the adjacent margins contiguous, from the opening a long, slender, chitinized rod and a few long, coarse, yellow hairs protrude. Eighth sternite unarmed, somewhat projecting behind. Eighth tergite entirely concealed beneath the seventh tergite.

*Habitat*.—California.

*Holotype*.—♂, Foothills of Mount Shasta, California, May 17, 1914.

*Paratopotypes*.—Males with the type, May 16, 17; *paratypes* two ♂'s, Yosemite Valley, California, May 22, 1908, (E. T. Cresson, Jr.).

The type is in the collection of Dr. Dietz; paratypes in the collection of the writer and the American Entomological Society.

This beautiful, yellow-winged *Tipula* is related to *T. angustipennis* Lw. of northern North America, but is abundantly distinct. The type material was very kindly sent me by Dr. Dietz with the indication that it probably represented a new species. The writer could not reconcile the fly with any of the descriptions, and sent the material to Prof. Doane for his opinion and comparison with his extensive series of Western *Tipulas*. He also believes the species to be close to *T. angustipennis*, which is certainly the case, but the two species show numerous constant differences. Prof. Doane writes that he has a female of this species from the Yosemite Valley.

## NOTES ON PELENOMUS SULCICOLLIS FÄHRS. (CURCULIONIDÆ).

BY ROBERT MATHESON, ITHACA, N. Y.

During the past three seasons a small patch of some five or six square yards of fringed loosestrife (*Steironema ciliatum* (L) Raf.) growing on the bank of a small stream which passes near my house has been badly destroyed by some foliage feeding insect. My attention was attracted to it this season as nearly every plant, and it was almost a pure stand of this species, was practically destroyed, the leaves having been completely riddled, and many of the stalks badly eaten. Previous examinations had shown that a small coleopterous larva was doing the work, but I had not noted them in any considerable numbers. Late in July (1918) I found numerous small silken cocoons scattered over the under side of the leaves of the loosestrife, and on later examination I found many small snout beetles feeding on the plants.

As the beetle seemed to be a species about which very little was known, I reared a few of the larvæ and made a close examination for the place of egg deposition. My efforts were rewarded and, though rather late in the season, I found all stages of the beetle. The beetle was kindly identified by Mr. C. W.